

U. S. Coast Survey.  
Benj. Peirce. Supdt.  
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Letter Book and Abstract—  
Showing disposition made of  
Records and Reductions  
by the  
Longitude Party.  
1868—



KG 1136 5.386

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## U.S. Coast Survey Longitude Records and Reductions.

| Year.   | Place of observations.            | Records.      |                      |                                 |                 |          |
|---------|-----------------------------------|---------------|----------------------|---------------------------------|-----------------|----------|
|         |                                   | Original.     |                      |                                 | Total original. |          |
|         |                                   | Day<br>Books. | Metewl.<br>Journals. | Chronograph<br>Sheets (cahiers) | Vols.           | Cahiers. |
| 1852    | Seaton - Roslyn.                  | —             | —                    | —                               | —               | —        |
| 52-53   | Seaton - Raleigh - Charleston.    | 3             | —                    | 2                               | 3               | 2        |
| 53-54   | Raleigh - Columbia                | 3             | 1 ba.                | 2                               | 4               | 2        |
| 54      | Roslyn - De Rosset.               | 2             | 1 Rm.                | 2                               | 3               | 2        |
| '55     | Columbia - Macon -                | 4             | 1 ba.                | 3                               | 5               | 3        |
| 55-56   | Wilmington - Columbia.            | 5             | —                    | 2                               | 5               | 2        |
| 56      | Macon - Montgomery.               | 5             | —                    | 2                               | 5               | 2        |
| 56-57   | Montgomery - L.P. Tree - Mobile - | 11            | —                    | 6                               | 11              | 6        |
| '57     | Balaie - Bangor -                 | 4             | 1 ba.                | 2                               | 5               | 2        |
| 57      | Fredenickton - Balaie.            | 1             | —                    | —                               | 1               | —        |
| 57-58   | Mobile - New Orleans.             | 6             | —                    | 2                               | 6               | 2        |
| 58      | Albany - New York.                | 4             | 1 M.S.               | 2                               | 5               | 2        |
| 59-60   | Apalachicola - Eufaula.           | 5             | 2                    | 2                               | 7               | 2        |
| 60      | Macon - Eufaula.                  | 4             | 1 M.S.               | 2                               | 5               | 2        |
| 60-61   | Pensacola - Mobile.               | 5             | 2                    | 2                               | 7               | 2        |
| 66-67   | Valentia - Hearts Content.        | —             | —                    | —                               | —               | —        |
| 66-67   | Hearts Content - Balaie           | —             | —                    | —                               | —               | —        |
| 67      | Cambridge - Washington            | 3             | —                    | 2                               | 3               | 2        |
| Totals. |                                   | 65            | 10                   | 33                              | 75              | 33       |



As arranged at Harvard Observatory - 1867.

| Records - Duplicate. |                  |                            |                |                 |                 | Duplicate.                   |                 | Total            | Reductions. |                 |         | Total           |
|----------------------|------------------|----------------------------|----------------|-----------------|-----------------|------------------------------|-----------------|------------------|-------------|-----------------|---------|-----------------|
| Day<br>Book.         | Meth.<br>Inmate. | Readings of Chron. Sheets. |                |                 |                 | Day Book<br>and<br>Meth. Pl. | Readings        | Duplicate.       | Field       | Office          |         | Reductions      |
|                      |                  | Field                      | 1st<br>Office  | 2nd<br>Office   | 3rd<br>Office   |                              |                 |                  |             | Vol.            | Copies. |                 |
| 1 Res.               | —                | —                          | 2              | —               | —               | 1                            | 2               | 3                | —           | 1               | —       | 1               |
| + Sm.                | —                | 1                          | 2              | —               | —               | + 3                          | 3               | 4 <sup>5</sup>   | 2           | 7               | 1       | 10              |
| 3<br>2 ba.           | —                | 1                          | 3              | —               | —               | 2 <sup>3</sup>               | 4               | 6 <sup>7</sup>   | 1           | 3               | 1       | 5               |
| 2                    | —                | 3                          | 2              | 3               | —               | 2                            | 8               | 10               | 5           | 2               | 1       | 8               |
| 2                    | —                | 3                          | 4              | 2               | —               | 2                            | 9               | 11               | 4           | 3               | 1       | 8               |
| 2                    | —                | 3                          | 4 <sup>5</sup> | 1               | —               | 2                            | 8 <sup>9</sup>  | 10               | 4           | 4               | 1       | 9               |
| + 2                  | —                | 2                          | 4              | 3               | 3               | + 2                          | 12              | 13 <sup>4</sup>  | 4           | 4               | 1       | 9               |
| 1 <sup>0</sup>       | —                | 5                          | 7 <sup>8</sup> | 3 <sup>4</sup>  | 6               | 4                            | 22              | 22 <sup>23</sup> | —           | 4               | 2       | 6               |
| 3                    | —                | 2                          | 4              | 2               | 3               | 3                            | 11              | 14               | 3           | 2               | 1       | 6               |
| 1                    | —                | —                          | —              | —               | —               | 1                            | —               | 1                | —           | —               | —       | —               |
| 2 <sup>3</sup>       | —                | 4                          | 3              | 1               | 3               | 2                            | 11              | 13               | 5           | 3               | 1       | 9               |
| 2                    | —                | 1                          | 3              | 1               | 2               | 2                            | 7               | 9 <sup>7</sup>   | 2           | 2               | 1       | 5               |
| —                    | —                | 2                          | 3              | 2               | 1               | —                            | 8               | 8                | 4           | 2               | 1       | 7               |
| —                    | —                | 2                          | 2              | 1               | 2               | —                            | 7               | 7                | 2           | 2               | —       | 4               |
| —                    | —                | 2                          | 3              | 1               | 1               | —                            | 7               | 7                | 4           | 3               | 1       | 8               |
| —                    | —                | —                          | —              | —               | —               | —                            | —               | —                | —           | —               | —       | —               |
| —                    | —                | —                          | —              | —               | —               | —                            | —               | —                | —           | —               | —       | —               |
| 2                    | —                | —                          | 1              | ± <sup>2</sup>  | ± <sup>2</sup>  | 2                            | 3 <sup>5</sup>  | 5 <sup>7</sup>   | 1           | 2               | —       | 4 <sup>3</sup>  |
| 20                   | —                | 31                         | 48             | 21 <sup>2</sup> | 22 <sup>3</sup> | 20                           | 12 <sup>4</sup> | 14 <sup>4</sup>  | 41          | 42 <sup>4</sup> | 13      | 96 <sup>8</sup> |



KG 11365.386









# U.S. Coast Survey Longitude Records & Reductions

1868phae.proj...3879

| Year | Places of Observation   | Records   |                  |                          |                |         |
|------|-------------------------|-----------|------------------|--------------------------|----------------|---------|
|      |                         | Original  |                  |                          | Total Original |         |
|      |                         | Day Books | Meteor. Journals | Chrono. Sheets (câhiers) | Vols           | Câhiers |
| 1868 | New Orleans - Galveston | 3         |                  |                          |                |         |
| - 68 | do - Last Island        | 2         |                  |                          |                |         |



as arranged at Harvard Observatory. 1868-9

1

| Records - duplicate |                   |                           |                        |                        | Total                  |                               | Reductions |       | Total  |                      |
|---------------------|-------------------|---------------------------|------------------------|------------------------|------------------------|-------------------------------|------------|-------|--------|----------------------|
| Day Books           | Met <sup>rs</sup> | Readings of Chron. Sheets |                        |                        | Duplicates             |                               | Dup.       | Field | Office | Reduct <sup>ns</sup> |
|                     | Journals          | Field                     | 1 <sup>st</sup> office | 2 <sup>nd</sup> office | 3 <sup>rd</sup> office | Day Books<br>and<br>Met. Ges. |            |       |        |                      |



## General Notes.

Longitude Records. U. S. Coast Survey.  
Harvard Observatory.

1852 Seaton - Roslyn

No orig. Day Books found at either station - nor any  
 chronographic sheets.

One vol. dup. of Day Book at Roslyn.

(Two vols dup. in U. S. Coast Survey office) 14<sup>th</sup> Long.

Ob<sup>ns</sup> Roslyn 1852 (LSP) and 18<sup>th</sup> Roslyn 1852 (LSP)

One vol. Red<sup>d</sup> of Places of Stars exchanged for Diff. of Long.

1852-53

Seaton - Raleigh - Charleston

No orig. of D. B. at Seaton. Two orig. D. B's Rg, one Ch<sup>n</sup>.

Two cahiers Chron. Sheets. (one of Seaton Reg. at Ch<sup>n</sup> -  
 other of Sp. Jov. at Seaton). No chron. sheets for Rg.

(In U. S. C. S. office One Dub 4<sup>th</sup> Long. Ob<sup>ns</sup> by  
 Elect. Tel. Sn - Ch<sup>n</sup> 1852-53 - LSP.)

One vol. Dup. of D. B. at S<sup>n</sup>.

One vol. - apparently Field Rdg of ob<sup>ns</sup> Rg - Ch<sup>n</sup>.

Two vols office rdgs. Sn - Rg. and Rg - Ch<sup>n</sup>.

Two vols. Field Red<sup>d</sup> for Time Ch<sup>n</sup> - one a dup. of other.

Two " Office " S<sup>n</sup> - Ch<sup>n</sup>:

One do S<sup>n</sup> - Rg - Ch<sup>n</sup>

Three do Rg - Ch<sup>n</sup>

One cahier office Comp<sup>ns</sup> S<sup>n</sup> - Rg - Ch<sup>n</sup>

1853-54

Raleigh - Columbia

One Day Book - Rg - Two do Ca. One Met. J<sup>l</sup> Ca

One cahier Ker. Reg. sheet Rg. Dec<sup>r</sup> 29 - Feb 12

One " Sp. Jov. " Ca Feb 18 - Apr 2

Two dup. Day Bks. Ca. One Field Rdg. Rg.

Three office Rdgs. Rg - Ca.

One Field Comp<sup>ns</sup> for Time - Rg. Three vols. office  
 Comp<sup>ns</sup>. One cahier. Misc. comp<sup>ns</sup> in office.







3

General Notes.  
Longitude Records. U.S. Coast Survey  
Harvard Observatory.

1854. Roslyn - De Ross.

Two origl. D. Bks - one for each station. One Meteor.  
Journal Bk. One cah. Chron. sheet - Ker. Reg. Bk  
One do do Sp. Gov. DePt.  
Two dup. D. Bks - one for each station. Three vols.  
field edgs. S. Walker. Two vols. indep. edgs. and  
three supposed to be record edgs at office.  
Four vols. field red<sup>n</sup> for Time - three vols office  
reductions of longitude - one cahier office comp<sup>ns</sup>

1855. Columbia - Macon.

Four origl. D. Bks - two for each station. One origl.  
Meteor. J<sup>l</sup> - Ca. One cahier (2 sheets) Pers. Eg-  
mc. J<sup>l</sup> D - E G (Ker. Reg.)  
One cahier Sp. Gov. Chron. sheets. Ca. 1855  
One do Ker. Reg. do Me<sup>c</sup> 1855  
Two dup. D. Bks - one for each station. Three vols.  
field edgs. Inst<sup>l</sup> Cor. 1 Ca - 2 Me<sup>c</sup>. One vol  
office edgs. do Three vols office edgs Star Signals  
Two vols. office edgs - Morse Fillets.  
Four vols - field red<sup>n</sup> for Time. One vol. field and  
office comp<sup>ns</sup> alt of \*'s for Time & Long. Two vols  
comp<sup>ns</sup> of inst<sup>l</sup> Cor<sup>n</sup>. Ca and Me<sup>c</sup>. One cahier comp<sup>ns</sup>  
and Results for Long.

1855-56. Wilmington - Columbia.

Five origl. D. Bks - 3 W<sup>m</sup> - 2 Ca.  
Two cah. Chron. sheets - 1 Sp. Gov. at W<sup>m</sup>, 1 Ker. Reg. Ca.  
No dup. of D. Bks at either station. Three vols field  
edgs. Inst<sup>l</sup> Cor<sup>n</sup>: - 1 W<sup>m</sup> - 2 Ca.  
One vol. First office Redg - Pers. Eg<sup>t</sup> - One vol. first  
office edg - Inst<sup>l</sup> Cor<sup>n</sup> - one vol. first office edg. Long.  
Two vols. Second office edg. Chron. sheets & Morse fillets  
One vol. Third do Star Signals  
Four field comp<sup>ns</sup> for Time. Four office comp<sup>ns</sup> (one astron<sup>t</sup>  
miscellany - W<sup>m</sup> - Ca - one inst<sup>l</sup> cor<sup>n</sup> W<sup>m</sup> - one at Ca - one  
red<sup>n</sup> of Long. W<sup>m</sup> - Ca). No statement of resulting longitudes  
in bound vols. Table of longitude in Cahier of office comp<sup>ns</sup>.







General Notes.  
Longitude Records. U. S. Coast Survey.  
Harvard Observatory.

1856.

Macon - Montgomery

Two vols. orig. D. Bks - 2 M<sup>c</sup> - 3 My.Two cah. one Ker. Reg. M<sup>c</sup> - one Sp. Gov. My.No dupl. Day Book. Two vols. field rdgs. for Inst<sup>l</sup> Cor<sup>r</sup> - one M<sup>c</sup> - one My.One vol. first office rdg. inst<sup>l</sup> cor<sup>r</sup> - M<sup>c</sup> - My.

Three vols. do Long. do

One vol. Second office Rdg. Inst<sup>l</sup> Cor<sup>r</sup>.

Two vols. do Long.

Three vols. Third do do

Four vols. field red<sup>n</sup> for TimeOne vol. office red<sup>n</sup> of Thread Int<sup>l</sup> &cOne vol. miscellanea of previous work, and addenda - M<sup>c</sup> - My.One vol. office comp. Inst<sup>l</sup> Cor<sup>r</sup>One vol. Long. comp. - M<sup>c</sup> - My.

1856-57.

Montgomery - Lower Pack Tree - Mobile.

Four orig. D. Bks - My.

Three LPTree - Four Mobile

One cahier. Sp. Gov. sheets. Inst<sup>l</sup> Cor<sup>r</sup> - My

One " Ker. Reg " do Mo

One " Sp. Gov. " do &amp; Long. My - LPT

One " Ker. Reg " do LPTree

One " " " LPT - Mobile

One " Sp. Gov " Mo (LPTree - Mobile)

(In U. S. Coast Survey office 10 dupl. D Bks - My - LPT - Mo.)

No duplicates at Observatory.

(In U. S. C. S. office are One vol. Field Rdgs. Inst<sup>l</sup> Cor<sup>r</sup> - My & My - Mo  
5 vols. Field comp. One do do do My - Mo  
for Time) Two vols do do LPTree - My - LPT & Mo - LPTat Harv. Ob<sup>y</sup> Three One do do do Mobile - LPT - Mo.  
vols office comp. Inst<sup>l</sup> Cor<sup>r</sup> One vol. First office Rdg. Inst<sup>l</sup> Cor<sup>r</sup> - My - LPT - MoOne do - Long. Four vols do do Long. Ob<sup>y</sup> My - LPT

One cahier Miscellanea. Three vols do do do LPT - Mo

Three " Second do do My - LPT - Mobile

Six " Third do do do







General Notes.  
Longitude Records. U.S. Coast Survey  
Harvard Observatory.

7

1857. Calais - Bangor. Two vols origl. D. Bk. Cal. One Meteor. Jour<sup>l</sup> - Cal.  
Two do do Bangor. One vol. origl. D. Bk  
Fredoniton - Calais at Calais for Fred<sup>n</sup> - Calais.  
Two cahiers Chron. sheets - one for each place. - those  
for Fred<sup>n</sup> - Calais being included in the Calais cahier.  
One vol. Dup. Day Bk. Cal.  
Two vols Field Rds - Ins<sup>t</sup>. Cor<sup>n</sup>. Cal and Bangor  
One vol. First office Rdg. Ins<sup>t</sup>. Cor<sup>n</sup>.  
Three do do Longitude  
One vol. Second office Rdg. Ins<sup>t</sup>. Cor<sup>n</sup>.  
One " do do Longitude  
Three vols. Third office Rdg - do  
Three vols. Field Comps for Time  
One vol. office Comp. Ins<sup>t</sup>. Cor<sup>n</sup>.  
One do do Longitude  
One cahier do Miscellaneous  
The comps Fred<sup>n</sup> - Calais (and rds) are all included  
in above - only 4 stars having been exchanged.

1857-58.

Mobile - New Orleans. Three origl. D. Bks at each station.  
Two cahiers Chron. sheets - one Mo - one N.O.  
Two dup. D. Bks - Mo. Two vols. Field Rds. Ins<sup>t</sup>. Cor<sup>n</sup>. Mo  
One vol. Field Rds. Long. Mo. One vol. Field Rds -  
Ins<sup>t</sup>. Cor<sup>n</sup>. at N.O.  
One vol. First office rdg. Ins<sup>t</sup>. Cor<sup>n</sup>. Mo & N.O.  
Two vols do Long. do  
One vol. Second office rdg. Long. do  
Three vols Third do do do  
Two vols. Field Comps Time - Mo  
Three " do N.O.  
Two " Office do - M & N.O.  
One " " do Long. do  
One cahier office comp. - Miscellaneous







General Notes.  
 Longitude Records. U. S. Coast Survey.  
 Harvard Observatory.

1858.

Albany - New York. Two origl. D. Bks. Ay - two do N. Yk.  
 one Meteor? J! - N Yk.  
 Two cahies. Sp. Jov. sheet - one Ay - one N Yk.  
 No duplicate Day Books for either station.  
 One vol. Field Rdg. Inst<sup>l</sup>. Cori. + Pers. Eg. N. Yk  
 One " First office Rdg. do Ay - N Yk  
 Two vols do Long. do  
 One vol. Second office Rdg. Long. do  
 Two vols. Third do do  
 Two vols. Field Comp<sup>t</sup>. for Inst<sup>l</sup>. Cori. Ay - N. Yk  
 One " Office do do  
 One vol do Long.  
 one cahie office Comp<sup>t</sup> - Miscellaneous.

1859 - 60

Apalachicola - Eufrata. Three origl. D Bks. Apal. - two Euf. Two  
 Meteor? Journals - one for each station.  
 Two cahies Chron. sheets - one Ap - one Euf.  
 (In U. S. Coast Survey office - two dup. D. Bks.)  
 Two vols. Field Rdg - Inst<sup>l</sup>. Cori. one ap - one Euf.  
 One vol. First office Rdg. do  
 Two vols do Long.  
 Two vols. Second do do  
 One vol. Third do do  
 Four vols. Field Comp<sup>t</sup>. - Time + Inst<sup>l</sup>. Cori.  
 one vol office " do  
 one vol. do do Longitude  
 one cahie - office comp<sup>t</sup> Miscellaneous.







General Notes.  
Longitude Records. U. S. Coast Survey.  
Harvard Observatory.  
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11

1860

Macon - Enfaula. Two origl. DBks - M<sup>c</sup> - two do Euf.  
One meteor. Journal - M<sup>c</sup>.  
Two cah. Chron. sheets - M<sup>c</sup> - Euf.  
(In U. S. Coast Survey office - two dupl. Day Books)  
Two vols. Field Rdgs. Inst<sup>l</sup>. Cont. one M<sup>c</sup> - one Euf.  
One " First office Rdg. do  
One " do Long.  
One " Second do do  
One " Third do do  
Two vols. Field Comp. Inst<sup>l</sup>. Cont.  
One " office do do  
One " do do Long.  
The miscellaneous office comp<sup>r</sup>. for M<sup>c</sup> - Euf.  
are contained in the cahier for Apalach - Euf.

1860 - 1861

Pensacola - Mobile. Three origl. DBks - Pensacola  
two do do Mobile  
Two Meteor. Journals one Pa - One Mo.  
Two cahiers - chron. sheets.  
(In U. S. C. S. office 4 vols duplicate DBks)  
Two vols. Field Rdgs. Inst<sup>l</sup>. Cont. Pa - Mo  
One " office " do Pa + Mo.  
Two " do Clock + Star Signals do  
One " Second office Rdg. Long. + Inst<sup>l</sup>. Cont.  
One " Third do do  
(In U. S. C. S. office - one vol Field Comp<sup>r</sup>. for Time)  
Four vols. Field Comp<sup>r</sup>. Time + Inst<sup>l</sup>. Cont.  
Two vols office " Inst<sup>l</sup>. Cont.  
One " " Long.  
one cahier - Miscellaneous comp<sup>r</sup>. Office







# Values adopted at New Orleans. 1868.

| Order          | Intervals | Sum of Values<br>adj.<br>Log.          | Values               | Sums.     | Means.   | Log. of Means. |
|----------------|-----------|----------------------------------------|----------------------|-----------|----------|----------------|
| B <sub>1</sub> | + 34.166  | } + 146.397<br>+ 29.279<br>1.46656     | B <sub>b</sub>       | + 219.576 | + 21.958 | 1.34159        |
| 2              | 31.794    |                                        | B <sub>b</sub> D     | + 219.801 | + 14.653 | 1.16593        |
| 3              | 29.270    |                                        | B <sub>b</sub> D E   | + 146.643 | + 7.332  | 0.86522        |
| 4              | 26.851    |                                        | B <sub>b</sub> D     | + 73.404  | + 7.340  | 0.86570        |
| 5              | 24.316    |                                        | B <sub>b</sub> D E   | + 0.246   | + 0.016  | 8.20412        |
| B <sub>1</sub> | 19.446    | } + 73.179<br>+ 14.636<br>1.16542      | B <sub>b</sub> D E F | - 146.397 | - 7.320  | no. 86451      |
| 2              | 17.144    |                                        | D E                  | - 72.938  | - 7.293  | no. 86291      |
| 3              | 14.585    |                                        | D E F                | - 219.576 | - 14.638 | no. 16548      |
| 4              | 12.214    |                                        | E F                  | - 219.801 | - 21.980 | no. 134203     |
| 5              | 9.790     |                                        |                      |           |          |                |
| D <sub>1</sub> | 4.914     | } + 0.225<br>+ 0.045<br>8.65321        |                      |           |          |                |
| 2              | + 2.461   |                                        |                      |           |          |                |
| 3              | - 0.026   |                                        |                      |           |          |                |
| 4              | 2.382     |                                        |                      |           |          |                |
| 5              | 4.742     |                                        |                      |           |          |                |
| E <sub>1</sub> | 9.681     | } - 73.158<br>- 14.632<br>no. 1.16530  |                      |           |          |                |
| 2              | 12.219    |                                        |                      |           |          |                |
| 3              | 14.632    |                                        |                      |           |          |                |
| 4              | 17.157    |                                        |                      |           |          |                |
| 5              | 19.469    |                                        |                      |           |          |                |
| F <sub>1</sub> | 24.456    | } - 146.643<br>- 29.329<br>no. 1.46730 |                      |           |          |                |
| 2              | 26.861    |                                        |                      |           |          |                |
| 3              | 29.391    |                                        |                      |           |          |                |
| 4              | 31.775    |                                        |                      |           |          |                |
| 5              | - 34.160  |                                        |                      |           |          |                |







# U. S. Coast Survey Longitude Records and Reductions

| Year    | Places of Observation                         | Records   |                              |                                |                |           |
|---------|-----------------------------------------------|-----------|------------------------------|--------------------------------|----------------|-----------|
|         |                                               | Original  |                              |                                | Total Original |           |
|         |                                               | Day Books | Meteor <sup>2</sup> Journals | Chronographic Sheets (cahiers) | Vols.          | Cahiers   |
| 1852    | Seaton - Roslyn                               | —         | —                            | —                              | —              | —         |
| 1852-53 | Seaton - Raleigh - Charleston.                | 3         | —                            | 2                              | 3              | 2         |
| 53-54   | Raleigh - Columbia                            | 3         | 1 Ca                         | 2                              | 4              | 2         |
| 54      | Roslyn - De-Rosset                            | 2         | 1 Rn                         | 2                              | 3              | 2         |
| 55      | Columbia - Macon                              | 4         | 1 Ca                         | 3                              | 5              | 3         |
| 55-56   | Wilmington - Columbia                         | 5         | —                            | 2                              | 5              | 2         |
| 56      | Macon - Montgomery                            | 5         | —                            | 2                              | 5              | 2         |
| 56-57   | Montgom <sup>7</sup> - I. Peach Tree - Mobile | 11        | —                            | 6                              | 11             | 6         |
| 57      | Calais - Bangor                               | 4         | 1                            | 2                              | 5              | 2         |
| 57      | Fredenclon - Calais                           | 1         | —                            | —                              | 1              | —         |
| 57-58   | Mobile - New Orleans                          | 6         | —                            | 2                              | 6              | 2         |
| 58      | Albany - New York                             | 4         | 1                            | 2                              | 5              | 2         |
| 59-60   | Apalachicola - Eufaula                        | 5         | 2                            | 2                              | 7              | 2         |
| 60      | Macon - Eufaula                               | 4         | 1                            | 2                              | 5              | 2         |
| 60-61   | Pensacola - Mobile                            | 5         | 2                            | 2                              | 7              | 2         |
|         |                                               |           |                              |                                | <u>72</u>      | <u>31</u> |



As arranged at Harvard Observatory. Sept. 1867

| Records - Duplicate |                   |                           |                        |                        |                        | Duplicates    |          | Total      | Reductions |        |         | Total           |
|---------------------|-------------------|---------------------------|------------------------|------------------------|------------------------|---------------|----------|------------|------------|--------|---------|-----------------|
| Day                 | Met <sup>rs</sup> | Readings of Chron. Sheets |                        |                        |                        | Day Books and | Readings | Duplicates | Field      | Office |         | Reduction       |
| Books               | Journals          | Field                     | 1 <sup>st</sup> office | 2 <sup>nd</sup> office | 3 <sup>rd</sup> office | Meteor. B.    |          |            |            | Vols.  | Cahiers |                 |
| 1 (Rn)              | —                 | —                         | 2                      | —                      | —                      | 1             | —        | 3          | —          | 1      | —       | 1               |
| 3X (Sn)             | —                 | 1                         | 2                      | —                      | —                      | 1             | 3        | 4          | 2          | 6      | 1       | 9 <sup>10</sup> |
| 3X (Ca)             | —                 | 1                         | 3                      | —                      | —                      | 2             | 4        | 6          | 1          | 3      | 1       | 5               |
| 2                   | —                 | 3                         | 2                      | 3                      | —                      | 2             | 8        | 10         | 5          | 2      | 1       | 8               |
| 2                   | —                 | 3                         | 4                      | 2                      | —                      | 2             | 9        | 11         | 4          | 3      | 1       | 8               |
| 2X*                 | —                 | 3                         | 5                      | 1                      | X                      | X*            | 9        | 10         | 4          | 4      | 1       | 9               |
| 2X*                 | —                 | 2                         | 4                      | 3                      | 3                      | X             | 12       | 12         | 4          | 4      | 1       | 9               |
| 1*                  | —                 | 5                         | 8                      | 3                      | 6                      | X             | 22       | 22         | —          | 4      | 2       | 6               |
| 3                   | —                 | 2                         | 4                      | 2                      | 3                      | 3             | 12       | 4          | 3          | 2      | 1       | 6               |
| 1                   | —                 | —                         | —                      | —                      | —                      | 1             | —        | 1          | —          | —      | —       | —               |
| 2 <sup>3</sup>      | —                 | 4                         | 3                      | 1                      | 3                      | 2             | 11       | 13         | 5          | 3      | 1       | 9               |
| 2                   | —                 | 1                         | 3                      | 1                      | 2                      | —             | 7        | 7          | 2          | 2      | 1       | 5               |
| —                   | —                 | 2                         | 3                      | 2                      | 1                      | —             | 8        | 8          | 4          | 2      | 1       | 7               |
| —                   | —                 | 2                         | 2                      | 1                      | 2                      | —             | 7        | 7          | 2          | 2      | —       | 4               |
| —                   | —                 | 2                         | 3                      | 1                      | 1                      | —             | 7        | 7          | 4          | 3      | 1       | 8               |
|                     |                   |                           |                        |                        |                        |               |          | 131        |            |        |         | 94              |
|                     |                   |                           |                        |                        |                        |               |          | +1         |            |        |         |                 |
|                     |                   |                           |                        |                        |                        |               |          | +2         |            |        |         |                 |
|                     |                   |                           |                        |                        |                        |               |          | +2         |            |        |         |                 |
|                     |                   |                           |                        |                        |                        |               |          | +1         |            |        |         |                 |

\* Made after compilation of this list.



Sept. 18. 1867. Received information that the following  
 records relating to Seaton-Roslyn  
 were in the red box marked  
 "Occultation" in "U.S. Coast Survey Office."  
 1 portfolio Sp. Grav. sheets Seaton-Roslyn. 1852  
 2 bundles Stone Fillets do  
 1 bundle Miscellaneous papers Sn-Ra.

Also in U.S.C.S. office (same box)  
 1 8<sup>vo</sup> Bp of records of obs<sup>ns</sup> at Seaton for Sn-Roslyn



## Longitude Records

| Date<br>1868 | Vol.                               | By whom<br>taken | When<br>returned             |
|--------------|------------------------------------|------------------|------------------------------|
| Oct. 29      | Reductions. Vol 2                  |                  | Returned Nov. 3 <sup>d</sup> |
| do           | Camb-Senton                        | Miss Lane        |                              |
|              | Record do                          | do               | do.                          |
| do           | Readings do 3 <sup>rd</sup> office | do               | do.                          |
| Nov. 3       | N. Orleans Daybooks                |                  | do Dec 10 <sup>th</sup>      |
|              | 2 vols.                            | do.              | do                           |
| do.          | Galveston Daybook 1 vol.           | do.              |                              |



Cambridge. Mass.  
Oct. 29. 1868.

Prof. Joseph Winlock

Director of Harvard Observatory,  
Cambridge:

Dear Sir:

I have the honor to forward herewith two volumes, duplicate, of Coast Survey Records, containing the observations for Difference of Longitude by telegraph, made at the Coast Survey Station Leaton, Capitol Hill, Washington in 1867.

All the data necessary for the reduction of the observations will be found in the records, so that you will be enabled to deduce from them, when compared with the corresponding observations at Cambridge,







the difference of Longitude, Cambridge. - Seaton.

Very Respectfully Yours.

Benjamin Peirce  
Supt. U. S. Coast Survey.

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A rough sketch of books  
on these shelves.

Nervand Otsig  
Oct. 1868.





Seaton - Roslyn

1852. ✓ Seaton - Roslyn. Long. Obsns. 2 vols. Vol. V 102  
 Roslyn Daybook 1 vol.

Raleigh - Charleston.

1853 Raleigh Timebook Rg.-Chr. 1 vol. } duplicated  
 Charleston Daybook " " }  
 Raleigh Timebook 2 vols.  
 Charleston Daybook 1 vol.

Seaton - Raleigh

Sn.-Rg.-Chr. Rg.-Chr. Long. Obsns. 1 vol. Vol. V No. 1  
 Sn.-Rg. " " " " " " "  
 Rg.-Chr. " " " " Vol. IV No. 2  
 Seaton Daybook 1 vol.  
 Sn.-Rg. Reduction " " Vol. VII  
 Sn.-Rg. Comp<sup>n</sup> for Inst. Cour. at Sn. " " " II  
 Sn.-Rg. Long. Comp<sup>n</sup> " " " VI  
 Sn.-Rg. Rg.-Chr. Obsns for Inst. Cour. " " " III  
 Sn.-Rg. Vol. IV Rg.-Chr. Vol. II Computation for Inst. Cour. Rg.  
 Rg.-Chr. Long. Comp<sup>n</sup> 1 vol. Vol. VI  
 Rg.-Chr. Comp<sup>n</sup> for Inst. Cour. Chr. 1 vol. Vol. IV  
 Charleston Timebook 2 vols. duplicated

Raleigh - Columbia

1854 Raleigh Daybook Rg.-Ca. 1 vol.  
 Columbia Timebook 2 vols.  
 Columbia Meteorological 1 vol.  
 Raleigh Daybook " " duplicated  
 Columbia Daybook 2 vols.  
 Field Readings Inst. Cour. Rg. 1 vol. Vol. I No. 2  
 Obsns Inst. Cour. Rg. " " " " "  
 " " Ca. " " " III  
 Long. Obs<sup>n</sup> Office Reading Rg.-Ca. " " " V  
 Rg. Timebook Rg.-Ca. " " "  
 Rg.-Ca. Comp<sup>n</sup> Apparent AR Vol. VII 2; Vol. VI 1 vol.  
 Rg.-Ca. Miscellaneous 1 vol. Vol. VII, 1  
 Comp<sup>n</sup> of Inst. Cour. Rg. & Ca. " " " IV, Vol II





Wilmington - Columbia1855-56

|                                                       |                                     |               |                                |
|-------------------------------------------------------|-------------------------------------|---------------|--------------------------------|
| Wilmington Daybook                                    | Mr. Ca.                             | 2 vols.       |                                |
| Columbia                                              | "                                   | "             | "                              |
| Wilmington                                            | "                                   | 1 vol.        | } duplicates                   |
| Columbia                                              | "                                   | "             |                                |
| Obsns Inst. Coun                                      | Wilmington Field Readings           | 1 vol.        | Vol. I                         |
| "                                                     | Columbia                            | 2 vols.       | " III                          |
| Long. Obsns                                           | 1 <sup>st</sup> Independent Reading | 1 vol.        |                                |
| "                                                     | 1 <sup>st</sup> Office Reading      | "             | Vol. V                         |
| Obsns for Inst. Coun                                  | 1 <sup>st</sup> Office Reading      | Mr. Dupl.     | Vol. I No. 2 Vol. III          |
| Long. Obsns                                           | "                                   | 1 vol.        | Vol. V No. 2                   |
| Second Independent Office Read <sup>g</sup>           | Long                                | "             | "                              |
| Personal Equation                                     | "                                   | "             | Duplicate                      |
| Wilmington Timebook                                   | "                                   | 2 vols.       |                                |
| Columbia                                              | "                                   | "             | "                              |
| Astronomical Miscellany                               | "                                   | "             | Vol. VII                       |
| Computation Inst. Coun at Wilmington                  | "                                   | 1 vol.        | " II                           |
| "                                                     | Columbia                            | "             | " IV                           |
| Comp <sup>d</sup> of Long <sup>s</sup> at Both Places | 1 vol.                              | Mr.-Col. 1856 | Vol. VI Col.-Mac. 1855 Vol. VI |

Macon - Montgomery1856

|                                               |                                         |         |                    |
|-----------------------------------------------|-----------------------------------------|---------|--------------------|
| Macon Daybook                                 | Mc-Mg.                                  | 2 vols. |                    |
| Montgomery                                    | "                                       | 3       | "                  |
| Macon Daybook                                 | "                                       | 1 vol.  | } duplicates       |
| Montgomery                                    | "                                       | 1       |                    |
| Obsns Inst. Coun                              | Field Readings                          | "       | Vol. I             |
| "                                             | Longitude Mg.                           | "       | "                  |
| "                                             | Inst. Coun Mc. Office Read <sup>g</sup> | "       | "                  |
| First Readings                                | Long. Obsns                             | 3 vols. |                    |
| Obsns Inst. Coun                              | "                                       | 1 vol.  | Vol. I & III No. 2 |
| Longitude Obsns                               | "                                       | 2 vols. | Vol. V             |
| Independent Readings                          | Mc-Mg.                                  | 3       | "                  |
| Macon Timebook                                | "                                       | 2       | "                  |
| Montgomery                                    | "                                       | "       | "                  |
| Astronomical Miscellany                       | "                                       | 1 vol.  | Vol. VII           |
| Addenda                                       | "                                       | "       | "                  |
| Comp <sup>d</sup> of Inst. Coun, Both Places, | "                                       | "       | Vol. II Vol. IV    |
| Longitude Computations                        | "                                       | 1 vol.  | Vol. VI, 1         |
| Obsns for Longitude                           | Macon                                   | "       | } duplicated       |
| "                                             | Montgomery                              | "       |                    |

Calais & Bangor



# Calais + Bangor cont.

1857

|                                      |         |              |
|--------------------------------------|---------|--------------|
| Calais Timebook                      | 2 vols. |              |
| Bangor " "                           | 1 vol.  |              |
| Computation Instr. Corr. Both Places | " "     | Vols II + IV |
| Cal.-Bang. Fred.-Cal. Comp. of Long. | " "     | " VI + VI    |
| Fredrickton Daybook Cal.-Bang.       | " "     |              |
| Obs. for Longitude Fred.-Cal. Calais | " "     |              |
| Fredrickton Daybook                  | " "     |              |

## Mobile - New Orleans.

1857, 58

|                                           |         |              |
|-------------------------------------------|---------|--------------|
| Mobile Daybook                            | 3 vols. |              |
| N. Orleans " "                            | " "     |              |
| Obs. for Long. N. O.                      | 1 vol.  | dupl.        |
| Mobile Daybook                            | 2 vols. |              |
| Inst. Corr. Ready Mob.                    | " "     |              |
| Field Readings, Longitude, Mob.           | 1 vol.  |              |
| " " Inst. corr. N. O.                     | " "     |              |
| Obs. Inst. Corr + Pres. Equat Both Places | " "     | Vols I + III |
| First Long. Ready Mob. - N. O.            | 2 vols. |              |
| Second Office Long. Ready Mob. - N. O.    | 1 vol.  |              |
| Third " " "                               | 3 vols  | Vol. V       |
| Mobile Timebook                           | 2 "     |              |
| N. Orleans " "                            | 3 "     |              |
| Comp. Inst. Corr Mobile                   | 1 vol.  | Vol II       |
| " " " "                                   | " "     | " IV         |
| Long. Computations Mob. - N. O.           | " "     | " VI         |

## New York - Albany

|                                |         |             |
|--------------------------------|---------|-------------|
| New York Daybook               | 2 vols. |             |
| Albany " "                     | " "     |             |
| N. Y. Meteorolog. obs.         | 1 vol.  |             |
| " Daybook                      | " "     | dupl.       |
| Albany " "                     | " "     | "           |
| Field Ready Inst. corr. N. Y.  | " "     |             |
| 1st Office Reading Inst. corr. | " "     | Vols I, III |
| Readings of star signals       | 2 vols. |             |
| Independent Readings           | 1 vol.  |             |
| Obs. for Long. Both Places     | 2 vols. | Vol. V      |
| N. Y. Timebook                 | 1 vol.  |             |
| Albany " "                     | " "     |             |
| Comp. Inst. corr.              | " "     | Vols II, IV |

1860

Apalachicola - Eufaula

|                                          |                                           |
|------------------------------------------|-------------------------------------------|
| Apalachicola Daybook                     | 3 vols.                                   |
| Eufaula                                  | 2 "                                       |
| Meteorological obsns at Apalachicola     | 1 vol.                                    |
| " " " Eufaula                            | " "                                       |
| Field Readings Instl. Cor. Apa.          | " "                                       |
| " " " Euf.                               | " "                                       |
| Office Readings of obsns for Instl. cor. | " " I III                                 |
| First Office Readings                    | 2 vols.                                   |
| Second " "                               | " "                                       |
| Long. obsns                              | 1 vol. Vol. V No. 2                       |
| Apalachicola Timebook                    | 2 vols.                                   |
| Eufaula " "                              | " "                                       |
| Comp. Instl. cor. Both Places            | 1 vol. Vol. II + IV                       |
| Remainder of Long. Obsns Comp. of Long.  | " " Apa-Euf. Vol. V No. 2 }<br>" " " VI } |

Macon - Eufaula

|                                      |                  |
|--------------------------------------|------------------|
| Eufaula Daybook                      | 2 vols.          |
| Meteorological obs. at Macon         | 1 vol.           |
| Macon Daybook                        | 2 vols.          |
| Field obs. Instrl. corr. Macon       | 1 vol.           |
| " " " Eufaula                        | " "              |
| Obsns for Instl. cor. Both Places    | " " Vol. I, III  |
| First Independent Readg! Long. Sigt. | " "              |
| Second " " " "                       | " "              |
| Long. Obsns                          | 2 vols. Vol. V   |
| Eufaula Timebook                     | 1 vol.           |
| Macon                                | " "              |
| Computation Instl. Cor. Both Places  | " " Vol. II + IV |
| " " Longitude                        | " " Vol. VI      |



Pensacola - Mobile.1860-61

|                                                              |   |       |              |
|--------------------------------------------------------------|---|-------|--------------|
| Pensacola Daybook                                            | 3 | vols. |              |
| Mobile "                                                     | 2 | "     |              |
| Pens. Meteor.                                                | 1 | vol.  |              |
| Mobile "                                                     | 1 | "     |              |
| Field readings of Chronograph at Mob.                        | 1 | "     |              |
| " " " Pens.                                                  | 1 | "     |              |
| Obs'n Instl. corr. & Pers. Equalum Both Places               | 1 | "     | Vols I, III  |
| Longitude Readings                                           | " | "     |              |
| Independent Readg. used in the comp. of Long. by clock sigt. | 1 | vol.  |              |
| " " for Long. & Instl. corr.                                 | 1 | vol.  |              |
| Obs'n's for Longitude                                        | " | "     | Vol. V       |
| Pensacola Timebook                                           | 2 | vols. |              |
| Comparison Chron.                                            | 1 | vol.  |              |
| Mobile Timebook                                              | " | "     |              |
| Computation Instl. corr. Both Places                         | " | "     | Vols II & IV |
| " " Pensacola                                                | " | "     | Vol. II No 1 |
| Long. observations                                           | " | "     | Vol. VI      |

Cambridge - Washington.1867

|                                                                              |   |       |                         |
|------------------------------------------------------------------------------|---|-------|-------------------------|
| Camb.- Alb.- Sn.- Nav. Daybooks                                              | 2 | vols. |                         |
| Comp. for Long. at Sn.                                                       | 1 | vol.  |                         |
| Seaton Daybook, duplicate                                                    | " | "     |                         |
| Camb. Long. Obsns., First Office Rdg.                                        | " | "     |                         |
| " Inst. corr., Pers. Eq., & Long <sup>e</sup> - Sec <sup>d</sup> Office Rdg. | " | "     |                         |
| " " " " Third "                                                              | 3 | vols. |                         |
| " Long. Obsns., Origl.                                                       | 1 | vol.  |                         |
| " " Duplicate                                                                | " | "     |                         |
| <u>1867-68</u> Long. Computations - both places                              |   |       | Vol <sup>s</sup> I & II |

1868N. Orleans - Galveston

|                     |   |       |       |
|---------------------|---|-------|-------|
| New Orleans Daybook | 2 | vols. |       |
| " " "               | 1 | vol.  | dupl. |
| Galveston Daybook   | 1 | vol.  | orig. |
| " " "               | " | "     | dupl. |

New Orleans - Last Island.1868Last Is. Obs. for Long.  
" " " " Time1 vol.  
" "









List of Original Longitude Records (Day Books)  
To be duplicated.  
Harvard Observatory. Sept. 1867.

| Year     | Campaign                                                                                                                                                                                                  | Place of Observation | Vols | By whom duplicated | Taken   | Returned |                                         |
|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|------|--------------------|---------|----------|-----------------------------------------|
| 18 52-53 | In - Ra - Ch <sup>r</sup>                                                                                                                                                                                 | Raleigh              | 2    |                    |         |          |                                         |
|          | do                                                                                                                                                                                                        | Charleston           | 1    |                    |         |          |                                         |
| 53-54    | Raleigh - Columbia                                                                                                                                                                                        | Raleigh              | 1    |                    |         |          |                                         |
| 54-55    | Columbia - Macon                                                                                                                                                                                          | Columbia             | 2    | F. Blake           |         | Aug 27   | compared as far as Jan 16 by E. M. Lane |
|          | do                                                                                                                                                                                                        | Macon                | 1    | E. M. Lane         | Sept 5  | Sept 18  |                                         |
| 55-56    | Wilmington - Columbia                                                                                                                                                                                     | Wilmington           | 3    | E. M. Lane         | Sept 5  | Octo 3   |                                         |
|          |                                                                                                                                                                                                           | Columbia             | 2    | do                 | " 18    | Octo 8   |                                         |
| 56       | Macon - Montgomery                                                                                                                                                                                        | Macon                | 2    | do                 | Octo 3  | Octo 23  |                                         |
|          |                                                                                                                                                                                                           | Montg <sup>y</sup>   | 3    | do                 | Octo 8  | Octo 23  |                                         |
| 57       | Calais - Bangor                                                                                                                                                                                           | Calais               | 1    | do                 | Octo 30 | Nov 8    | as yet incom-<br>plete.                 |
|          |                                                                                                                                                                                                           | Bangor               | 2    |                    | Octo 30 | Nov 15   |                                         |
| 57       | Fred <sup>r</sup> - Calais.                                                                                                                                                                               | Fredonville          | 1    | do                 | Nov 14  | 21       |                                         |
|          | In Fr-Calais orig. S. B. au to be inserted <sup>at Calais</sup> Octo 21 + 23 - now contained in vol 2 of Cal - Bangor also obs <sup>n</sup> + reduction of some at Fred <sup>r</sup> as per Prof. P. Sack |                      |      |                    |         |          |                                         |
| 57-58    | Mobile - New Or <sup>l</sup>                                                                                                                                                                              | New Or <sup>l</sup>  | 3    |                    |         |          |                                         |
| 58       | Albany - New York                                                                                                                                                                                         | Albany               | 2    |                    |         | " 21     |                                         |
|          |                                                                                                                                                                                                           | New York             | 2    |                    |         |          |                                         |
|          |                                                                                                                                                                                                           |                      | 28   |                    |         |          |                                         |



Thread Intervals Transit No. 6  
Values adopted at Galveston, 1868

|                | Intervals |   | Fallies | Sums     | Means   | Log. means |
|----------------|-----------|---|---------|----------|---------|------------|
| B <sub>1</sub> | +35.625   | } | BC      | +229.672 | +22.967 | 1.36110    |
| 2              | 33.113    |   | BCD     | +229.876 | +15.325 | 1.18540    |
| 3              | 30.617    |   | BCDE    | +153.227 | +7.661  | 0.88429    |
| 4              | 28.039    |   | CD      | +77.064  | +7.706  | 0.88683    |
| 5              | 25.418    |   | CDE     | +0.415   | +0.028  | 8.44716    |
|                |           |   | CDEF    | -152.812 | -7.641  | n 0.88315  |
| C <sub>1</sub> | 20.600    | } | DE      | -76.445  | -7.644  | n 0.88332  |
| 2              | 17.941    |   | DEF     | -229.672 | -15.311 | n 1.18500  |
| 3              | 15.392    |   | EF      | -229.876 | -22.988 | n 1.36150  |
| 4              | 12.692    |   |         |          |         |            |
| 5              | 10.235    |   |         |          |         |            |
| D <sub>1</sub> | 5.097     | } |         |          |         |            |
| 2              | 2.592     |   |         |          |         |            |
| 3              | +0.060    |   |         |          |         |            |
| 4              | -2.468    |   |         |          |         |            |
| 5              | 5.077     |   |         |          |         |            |
| E <sub>1</sub> | 10.096    | } |         |          |         |            |
| 2              | 12.824    |   |         |          |         |            |
| 3              | 15.331    |   |         |          |         |            |
| 4              | 17.959    |   |         |          |         |            |
| 5              | 20.439    |   |         |          |         |            |
| F <sub>1</sub> | 25.516    | } |         |          |         |            |
| 2              | 28.103    |   |         |          |         |            |
| 3              | 30.683    |   |         |          |         |            |
| 4              | 33.137    |   |         |          |         |            |
| 5              | -35.788   |   |         |          |         |            |
|                | +237.421  |   |         |          |         |            |
|                | -237.421  |   |         |          |         |            |



|    |     | $\bar{b}$ | $\bar{A}$ | $\bar{A}$            |
|----|-----|-----------|-----------|----------------------|
| 0  |     | -2.0      | -2.0      | -9.0                 |
|    |     |           |           | -1 - 5.5 -           |
| 10 | X00 | -10       | -4        | -5.0                 |
|    |     | -0.0      | -10.0     | -4.0                 |
|    |     |           |           | -5 - 4.3 -           |
| 20 | X00 | -28.2     | +5.0      | -10.2                |
|    |     |           |           | -14.1 - 2.2          |
|    |     |           | $\bar{A}$ | $\bar{b}$            |
| 0  |     | +2.0      | -2.0      | +9.0                 |
|    |     |           |           | +1.0 + 3.5 - + 2.5 - |
| 0  |     | +10.0     | -4        | +5.0                 |
|    |     |           |           | +5.0 + 0.5 - - 4.5 - |
| 0  |     | +28.2     | +5.0      | +10.2                |
|    |     |           |           | +14.0 + 7.6 - 6.4    |

Taken June 1  
by Edward Good fellow.

One cabin orig<sup>l</sup> computations  
Diff of Longitude —  
Cambridge — Seaton.

U. S. Coast Survey.

Benj. Peirce - Supd!

~~~~~

Letter Book and Abstract

showing disposition made of

Records and Reductions.

by the

Longitude Party.

~~~~~  
1868 —  
~~~~~























Schedule  
of  
Duplicate Records and Chronograph Readings  
of  
Longitude Obs<sup>ns</sup>. sent from Harvard Observatory  
to U. S. Coast Survey Office, Dec. 1868.

Year	Stations	Duplicate Daybooks	Duplicate Chronograph Sheets	Readings	Total
✓ 1852	Seaton - Roslyn	— *	2 vols. -	1 <sup>st</sup> office reading	2 vols.
1853	Seaton - Raleigh - Charleston	3 vols.	2 "	" " "	5 "
1853-4	Raleigh - Columbia	3 "	3 "	" " "	6 "
1854	Roslyn - De Rossett	2 "	3 "	2 <sup>nd</sup> " "	5 "
1855	Columbia - Macon	2 "	4 "	1 <sup>st</sup> " "	6 "
1855-6	Wilmington - Columbia	2 "	5 "	" " "	7 "
1856	Macon - Montgomery	2 "	3 "	2 <sup>nd</sup> " "	5 "
✓ 1856-7	Montgomery - Lower Pastre Mobile	— *	4 "	" " "	4 "
1857	Calais - Bangor	3 "	2 "	" " "	5 "
1857	Frederickton - Calais	1 "	—		1 "
1857-58	Mobile - New Orleans	3 "	{ 3 " 3 <sup>d</sup> " }	{ 1 <sup>st</sup> " " }	7 "
1858	Albany - New York	2 "	{ 2 " 3 <sup>d</sup> " }	{ 1 <sup>st</sup> " " }	5 "
✓ 1859-60	Apalachicola - Eufaula	— *	{ 2 " 2 <sup>d</sup> " }	{ 1 <sup>st</sup> " " }	3 "
✓ 1860	Macon - Eufaula	2 *	{ 2 " 3 <sup>d</sup> " }	{ 1 <sup>st</sup> " " }	3 "
✓ 1860-1	Pensacola - Mobile	— *	1 "	2 <sup>d</sup> " "	1 "
1867	Cambridge - Washington	2 "	1 "	3 <sup>d</sup> " "	3 "
Totals		25 vols.	43 vols.		68 vols.

\* Duplicates of the Daybooks for these stations are now in the Coast Survey Office.



Cambridge. Mass.

Oct. 29<sup>th</sup> 1868.

Commodore B.F. Sands.

U. S. Navy

Supt. Naval Observatory  
Washington.

Sir:

I have the honor to forward herewith two volumes duplicate, of Coast Survey Records, containing the Observations for Differences of Longitude by telegraph, made at the Coast Survey Station Seaton, Capitol Hill, Washington, in 1867.

All the data necessary for the reduction of the observations will be found in the records, so that you will be enabled to deduce from them, when compared with the corresponding observations at Naval Observatory, the difference of Longitude, Seaton - Naval.

I shall be glad to receive from you, at as early a date as may be convenient, a copy of the observations made for the same purpose at the Naval Observatory.

Very Respectfully yours.

Benjamin Peirce

Supt. U. S. Coast Survey.

Same to J.W. Hough. Director Dudley Obs. Albany  
Same to Joseph Millock do Harvard at Cambridge  
— omitting in letter to Prof. W. the last paragraph.

Cambridge. Mass.  
Octo 29. 1868

Dear Sir,

I have to forward herewith at request  
of Assistant Geo W. Dean the following records:  
One vol. dup.<sup>d</sup> Ob.<sup>n</sup> for Longitude, Chronom. Exped.<sup>n</sup> from  
New Orleans to Last Dec. 1868

One do do do Time do do

Will you please acknowledge receipt by letter addressed  
to me at 927 Clinton St. Philad.<sup>a</sup>

Very Respectfully yours  
Edmond Goodfellow.

J. E. Hilgard. Esq  
Assist<sup>t</sup> in Charge.  
U. S. Coast Survey Office.

Also to same address, Octo 29 - the following records  
One vol. dup.<sup>d</sup> Ob.<sup>n</sup> for Angles. Lavaca. Texas. 1868  
One do do Azimuth do do





# Forwarded to

1852 Sn-Rn One Day Book - Duplicate

52-53 Sn-Rg-Chi

53-54 Rg-Ca One vol. Rds of Chron. Sheets

54 Rn-DeR Five vols do do do

55 Ca-M<sup>c</sup> Five do do do

55-56 M<sup>c</sup>-Ca Four do do do

56 M<sup>c</sup>-Mly Nine do do do

56-57 Mly-LPT-M<sup>c</sup>\* Fifteen do do do

57 Cal-B<sup>r</sup> Eight do do do

57-58 Mo-N.O Seven do do do

58 Ay-N.Jh Four do do do

59-60

59-60 Ab-Suf Five do do do

60 M<sup>c</sup>-Suf Four do do do

60-61 Pen<sup>a</sup>-Mo Six do do do

Total Twenty three vols Rds of Chron. Sheets  
One vol. Duplicate Day Book

\* Three vols First office readings Mly-LPT-M<sup>c</sup> - not found



U. S. Coast Survey Office Nov. 1869

Year	Places of Observation	Records - Original					Reductions			
		Day Books	Motion Transits	Chronom. Shut (Cathies)	Total Orig. Books Columns	Field	Office Vols Columns	Total Reductions		
1852	Savon - Roslyn *						1	1		
52-53	Savon - Raleigh - Charleston	3		2	3 2	2	7 1	10		
53-54	Raleigh - Columbia *	3	1	2	4 2	1	3 1	5		
54	Roslyn - De-Rosset	2	1	2	3 2	4	3 1	8		
55	Columbia - Macon	4	1	3	5 3	4	3 1	8		
55-56	Wilmington - Columbia	5		2	5 2	4	4 1	9		
56	Macon - Montgomery	5		2	5 2	4	4 1	9		
56-57	Montgomery - LPT - Mobile	11		6	11 6		4 2	6		
57	Calais - Bangor	4	1	2	5 2	3	3 1	7		
57	Fred <sup>n</sup> - Calais	1			1					
57-58	Mobile - New Orleans	6		2	6 2	5	3 1	9		
58	Albany - New York	4	1	2	5 2	2	2 1	5		
59-60	Apalach - Eufaula	5	1	2	6 2	4	2 1	7		
60	Macon - Eufaula	4	1	2	5 2	2	2	4		
60-61	Pensacola - Mobile	5	2	2	7 2	4	3 1	8		
		62	9	31	71 31	39	44 13	96		







Abstract - showing disposition made  
 of  
 Records and Reductions by the Longitude Party. U. S. Coast Survey.

Records			Reductions		
Vols	Original	Duplicate	Vols	Field	Office
1		{ Day Book - Seaton Station - Wash <sup>n</sup> 1867			
1		{ Readings Chron. Sheet Seaton - Wash <sup>n</sup> 1867			
1		Obs. <sup>n</sup> Hor. Angles Laurea. Tex. 1868			
1		Obs. <sup>n</sup> Azimuth. do			
1		Obs. <sup>n</sup> Longitude. Chronom Exp. <sup>n</sup> to Last Id.			
1		Obs. <sup>n</sup> Time do			



Date 1868	Sent		Remarks
	Where	By whom	
Octo 29	Com. B.F. Sands. Supdt. Moral Obs. Wash.	Supdt. U.S. Coast Survey	Two volumes - one day book - one readings to each observatory.
do	Prof. Joseph Winlock. Cambridge	do	
do	" GW Ayrh - Albany	do	
do	J.E. Hilgard. Ass't in Charge	Edw. J. Goodfelloco	For assist. GW Dean
do	do	do	do
do	do	do	do
do	do	do	do















